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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,638	07/11/2001	Ingo Boeckmann	11150/30	2366.
26646	7590	03/02/2005	EXAMINER	
KENYON & KENYON ONE BROADWAY NEW YORK, NY 10004			WOZNIAK, JAMES S	
			ART UNIT	PAPER NUMBER
			2655	

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/807,638

Applicant(s)

BOECKMANN ET AL.

Examiner

James S. Wozniak

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/11/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. In response to the office action from 8/3/2004, the applicant has submitted an amendment, filed 11/3/2004, amending the specification, abstract, and claim 19, while adding claims 22-27 and arguing to traverse the art rejection based on the limitations regarding information and status messages relating to a voice output and selecting reading messages by a processing device (*Amendment, Page 7*). Applicant's arguments have been considered but are moot in view of the new grounds of rejection.

2. Based on the amendments to the abstract, specification and claim 19, the examiner has withdrawn the previous objections directed towards minor informalities.

Response to Arguments

3. With respect to **Claim 20**, the applicant argues that Marx et al (*U.S. Patent: 6,173,266*) fails to changing a dialog communication level in response to a failure to interact with a last of successive alternatives, however, as noted in the previous office action Marx discloses a means for providing alternative prompts in response to either a recognition or timeout error. Marx also provides the means for specifying a termination condition after a successive number of speech input attempts (*Col. 13, Line 40- Col. 14, Line 8*). Thus, after a failure to reply to a prompt and a

specified number of reprompts and that are alternatives of the original prompt (timeout or recognition errors), the dialog state will be reset or terminated. In other words a threshold retry number is reached when a user fails to properly respond to a reprompt for a final time. Therefore, Marx teaches the traversed claim limitation.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 11-13, 15, 17, 18, and 21** are rejected under 35 U.S.C. 102(b) as being anticipated by Tsunoda (*U.S. Patent: 4,359,713*).

With respect to **Claims 11 and 21**, Tsunoda recites:

Storing the at least one of information and status messages relating to a voice output in a speech memory (*voice memory, Col. 3, Lines 24-35, and Fig. 1, Element 11*);

Selectively reading the at least one of information and status messages by a processing device (*voice output selector, Col. 3, Lines 24-35, and Fig. 1, Element 10*); and

Outputting the at least one of information and status messages on an output device using an intonation in accordance with a relevance (*outputting a louder voice for urgent or important information, Col. 5, Lines 16-41*).

With respect to **Claim 12**, Tsunoda discloses:

The output device includes a loudspeaker (*Col. 4, Lines 1-4, and Fig. 1, Elements 16a-16d*).

With respect to **Claim 13**, Tsunoda recites:

Information and status messages requiring immediate action are output in the outputting step using a command intonation (louder voice used to warn a user to respond to a low fuel situation, *Col. 5, Lines 16-41*).

With respect to **Claim 14**, Tsunoda recites:

Information and status messages requiring immediate action are output in the outputting step at a high volume (*urgent message regarding low fuel, output in a louder warning voice volume, Col. 5, Lines 16-41*).

With respect to **Claim 15**, Tsunoda recites:

Information and status messages requiring immediate action are output in the outputting step in a harsh manner (*loud voice, Col. 5, Lines 16-41*).

With respect to **Claim 16**, Tsunoda discloses:

Changing the speaking voice, by selecting from a plurality of speaking voices, for information and status messages requiring immediate action (*different speaking voices for enabling a user to distinguish information in a warning message, Col. 7, Lines 49-68*).

With respect to **Claim 17**, Tsunoda recites:

Increasing the intonation and a connotation of the at least one of information and status messages requiring immediate action in accordance with importance (*increasing voice loudness to suggest an increased level of urgency to an observer, Col. 5, Lines 16-41, and Col. 8, Lines 1-7*).

With respect to **Claim 18**, Tsunoda recites:

Varying the intonation with a decreasing connotation for the at least one of information and status messages not requiring immediate action (*decreasing voice loudness to suggest a lowered level of urgency to an observers, Col. 5, Lines 16-41, and Col. 8, Lines 1-7*).

With respect to **Claim 22**, Tsunoda discloses:

At least of information and status messages is output in the outputting step in a time period in accordance with the relevance (*outputting voice warnings in a specific time order according to importance, Col. 7, Lines 49-68*).

With respect to **Claim 23**, Tsunoda recites:

The plurality of speaking voices includes a male voice and a female voice, the male voice used for the at least one of information and status messages requiring immediate action and the female voice used for the at least one of information and status messages not requiring immediate action (*outputting warning messages according to importance using a male and female voice, Col. 7, Lines 49-68*).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. **Claim 19** is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunoda in view of Gulau et al (*U.S. Patent: 5,584,052*).

With respect to **Claim 19**, Tsunoda teaches the method of volume alteration of a voice warning according to urgency, as applied to Claim 11. Tsunoda does not specifically suggest an additional step of controlling an electrical device using speech recognition, however, Gulau recites:

Controlling the at least one electrical device using speech recognition (*controlling various vehicle functions using a speech recognition engine, Col. 2, Lines 30-64*).

Tsunoda and Gulau are analogous art because they are from a similar field of endeavor in speech processing in an automotive application. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Tsunoda with the use of a speech recognition engine to control various vehicle functions as taught by Gulau to provide a hands-free and convenient means for automobile system control (*Gulau, Col. 2, Lines 30-64*).

8. **Claim 20** is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunoda in view of Marx et al (*U.S. Patent: 6,173,266*).

With respect to **Claim 20**, Tsunoda teaches the method of volume alteration of a voice warning according to urgency, as applied to Claim 11. Tsunoda does not teach the use of alternative messages or the change in dialog state supplied when a user fails to respond, however Marx discloses:

Successively outputting alternatives of the information and status messages in response to a failure to interact until an interaction occurs (*prompts and re-prompts provided until a threshold number of recognition errors or timeouts occurs, Col 13, Line 40- Col. 14, Line 8*).

Changing a dialog-communication level in response to a failure to interact with a last of the successive alternatives (*fallback and termination steps upon successive timeouts, Col. 13, Line 40- Col. 14, Line 8, and Fig. 6*).

Tsunoda and Marx are analogous art because they are from a similar field of endeavor in providing speech-based messages and information to a user. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Tsunoda with the method of providing multiple prompt attempts in varying forms to a user that implements fallback and termination steps upon successive interaction failures as taught by Marx in order to provide a convenient means for error recovery when a user fails to respond to a prompt or when a recognition error occurs (*Marx, Col. 13, Lines 12-67*).

With respect to **Claim 26**, Marx further recites:

The failures to interact include a lack of interaction (*failure to respond resulting in a timeout, Col. 13, Line 40- Col. 14, Line 8*).

9. **Claim 24** is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunoda in view of Marx et al (*U.S. Patent: 6,173,266*), and further in view of Nara et al (*U.S. Patent: 5,007,095*).

With respect to **Claim 24**, Tsunoda in view of Marx teaches the method of volume alteration of a voice warning according to urgency that also includes a means for reprompting a

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user after a failed interaction using an alternative prompt and changing a dialog state upon failing to respond to a final reprompt, as applied to Claim 20. Tsunoda in view of Marx does not specifically suggest the of generating a synthesized prompt using a random number generator, however the use of such a device for implementing a fluctuation in synthesized speech is well-known in the art, as is evidenced by Nara (Col. 9, Lines 3-19).

Tsunoda, Marx, and Nara are analogous art because they are from a similar field of endeavor in speech synthesis. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Tsunoda in view of Marx with the means for altering synthesized speech using a random number generator as taught by Nara in order to implement a well-known means for producing a natural sounding an modulated speech reprompt (*Nara, Col. 9, Lines 10-15*).

10. **Claim 25** is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunoda in view of Marx et al (*U.S. Patent: 6,173,266*), and further in view of Mandel et al (U.S. Patent: 4,400,787).

With respect to **Claim 25**, Tsunoda in view of Marx teaches the method of volume alteration of a voice warning according to urgency that also includes a means for reprompting a user after a failed interaction using an alternative prompt and changing a dialog state upon failing to respond to a final reprompt, as applied to Claim 20. Tsunoda in view of Marx does not specifically suggest that an alternative prompt differs in word arrangement, however Mandel recites:

The plurality of alternatives differs in word arrangement (Col. 1, Line 59- Col. 2, Line 8).

Tsunoda, Marx, and Mandel are analogous art because they are from a similar field of endeavor in system information presentation through synthesized speech. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Tsunoda in view of Marx with the means for arranging word order in a status message reprompt as taught by Mandel to prevent a monotonous repetition of the same message and increase message emphasis or urgency (*Mandel, Col. 1, Line 64- Col. 2, Line 1*).

11. **Claim 27** is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunoda in view of Marx et al (*U.S. Patent: 6,173,266*), and further in view of Chen et al (*U.S. Patent: 5,864,805*).

With respect to **Claim 27**, Tsunoda does not specifically suggest switching to a selection list upon a failure to interact. Tsunoda in view of Marx teaches the method of volume alteration of a voice warning according to urgency that also includes a means for reprompting a user after a failed interaction using an alternative prompt and changing a dialog state upon failing to respond to a final reprompt, as applied to Claim 20. Although Tsunoda in view of Marx teaches changing the dialog communication level to a fallback method upon repeated recognition errors, Tsunoda in view of Marx does not teach presenting a recognition candidate list to a user as a result of a recognition error, however Chen discloses such a means (*Col. 6, Line 66- Col. 7, Line 8*).

Tsunoda, Marx, and Chen are analogous art because they are from a similar field of endeavor in speech signal processing. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Tsunoda in view of Marx with

the means for presenting a recognition candidate list to a user as a result of a recognition error as taught by Chen in order to provide a means for a user to easily correct a recognition error by selecting an alternative choice from a list of recognition candidates (*Chen, Col. 1, Lines 26-43*).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Pickering (*U.S. Patent: 6,601,029*)- teaches a method for emphasizing an uncertain portion of a voice prompt by changing word order or voice volume.

Stammmler et al (*U.S. Patent: 6,839,670*)- teaches a speech dialog system for automobile systems control.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (703) 305-8669 and email is James.Wozniak@uspto.gov. The examiner can normally be reached on Mondays-Fridays, 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached at (703) 305-4827. The fax/phone number for the Technology Center 2600 where this application is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology center receptionist whose telephone number is (703) 306-0377.

James S. Wozniak
1/27/2005



DAVID L. OMETZ
PRIMARY EXAMINER